

## The Distribution of *Asceles margaritatus* in Borneo.

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### Key words

Phasmida, *Asceles margaritatus*, Distribution, Sarawak, Sabah, Brunei, Borneo.

*Asceles margaritatus* Redtenbacher is a common and widely distributed species in northern Borneo. It occurs in a short winged form on Mt Kinabalu in addition to the usual fully winged form which is found elsewhere. Both the males and females of the normal form are quite distinctive and easily identified. The females are unusually plump, have a wide head and thorax, and wings which stop well short of the end of the abdomen. Males have a black line along the centre of the head, pronotum and front of the mesonotum, and a distinctive black spot just in front of the elytra; although not unknown, it is rare for these characteristic markings on the male to be indistinct. Although easily recognised and quite common, previous records of this species are quite limited:

*Asceles margaritatus* Redtenbacher, 1908: 496, pl. 25.6a [♂] & 25.6b [♀], Syntypes ♂♂ & ♀♀ (NHMW).

*Asceles margaritatus* Redtenbacher, Günther, 1932: 316.

*Asceles margaritatus* Redtenbacher, Hausleithner, 1991: 222, fig 3 [short winged ♂].

*Asceles margaritatus* Redtenbacher, Sellick, 1993: 54, fig 1 [egg].

The fully winged form has only been recorded from a few areas: Ulu Dusun and Sepilok (Hausleithner, 1991) and Mt Kinabalu (Redtenbacher, 1908). The rather vague "Kina-Balu, Borneo" which is given as the type locality is of limited use; the mountain and its foothills spread over a wide area and no indication of altitude is given. Günther (1932) recorded this species from 1500m on Mt Kinabalu and Hausleithner recorded the short winged form from Kinabalu National Park Head Quarters at 1580m.

The distribution map shows all previous recorded localities, the single specimen in the Sarawak Museum (from Trusan) and my own previously unpublished records. Each site is indicated by a dot, except for the short winged form on Mt Kinabalu which is indicated by a cross. The records are from the following localities:

SARAWAK	Mt Serapi, 60-460m	E 110° 11'	N 1° 35'
	3km NE of Tatau	E 112° 52'	N 2° 54'
	17km SW of Selangau	E 112° 15'	N 2° 26'
	43km NE of Selangau	E 112° 39'	N 2° 40'
	3km NE Sungai Arip	E 112° 40'	N 2° 45'
	Niah National Park	E 113° 43'	N 3° 52'
	Trusan	E 115° 16'	N 4° 48'
BRUNEI	Teraja, waterfall trail	E 114° 25'	N 4° 17'
	Kuala Belalong, 100m	E 115° 09'	N 4° 32'
SABAH	Poring Springs	E 116° 43'	N 6° 03'
	Sepilok Forest Reserve	E 117° 57'	N 5° 50'
	Ulu Dusun	E 117° 45'	N 5° 46'
	Mt Kinabalu Park H.Q. 1580m	E 116° 33'	N 6° 00'

At these localities the number of specimens encountered has varied from single specimens (usually males) to an estimated 20 specimens of the short winged form on one night at Mt Kinabalu. When they have been found feeding there are usually several specimens on the same plant and often more on neighbouring plants. The method of egg laying, pinning the eggs to the leaves (see Sellick,

1993: 54), probably reduces predation and ensures a good survival rate. The nymphs and females are quite fat and soft bodied so they must be quite desirable to potential predators.

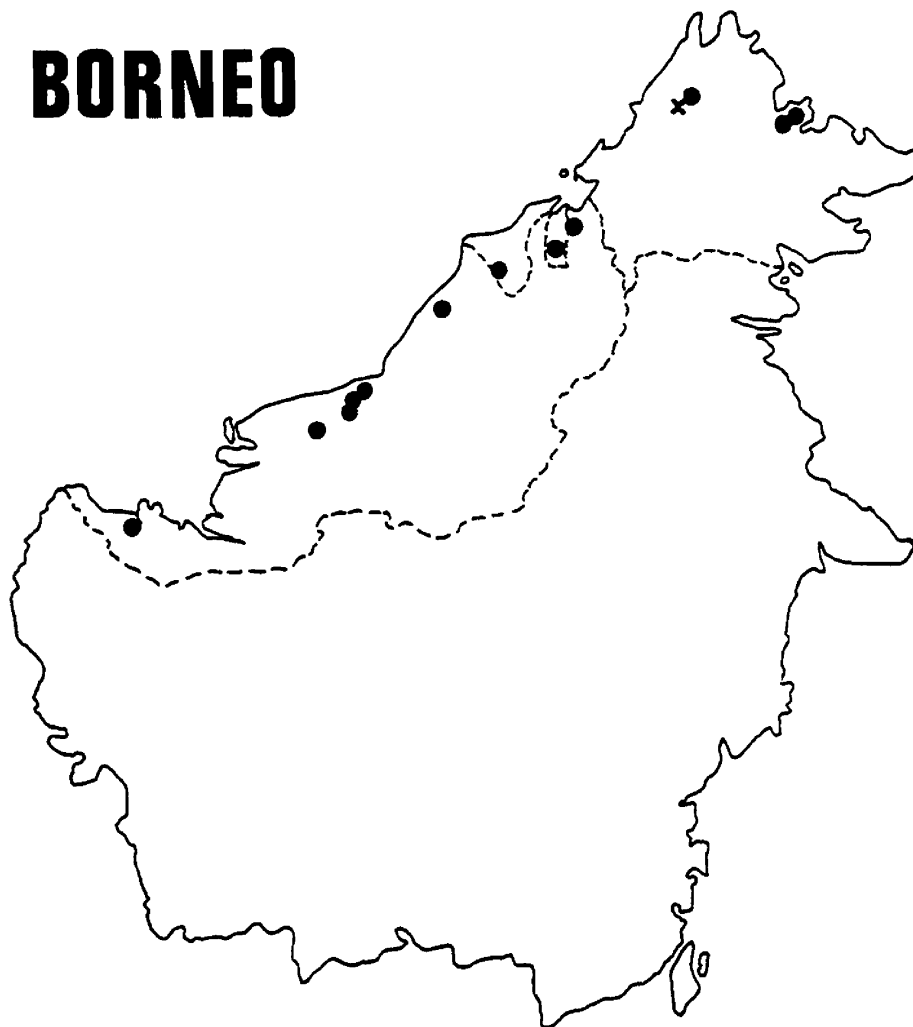


Figure 1. Distribution of *Asceles margaritatus*.

I have collected this species from a total of 11 localities and have successfully bred the short winged form for five generations. On a number of occasions I have found specimens feeding; in every case the foodplant was *Macaranga*, although not always the same species. In captivity the short winged form feeds on bramble, rose, raspberry, oak and eucalyptus. Eucalyptus is much preferred and is necessary to maintain a thriving culture; my culture has almost died out since I moved house and lost my supply of eucalyptus. When I had surplus specimens there were no requests for this species and as far as I am aware there are no other cultures of this species. The eggs of the short winged form take up to four months to hatch in the U.K.

### References

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